Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-303 July 8, 2003

Operations and Services
MARINE AND COASTAL WEATHER SERVICE PROGRAM, NWSPD 10-3

MARINE AND COASTAL SERVICES STANDARDS AND GUIDELINES

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/

OPR: OS21 (B. LaMarre) Certified by: OS21 (T. Pierce)

Type of Issuance: Routine.

SUMMARY OF REVISIONS: This directive supersedes NWSI 10-303, dated May 21, 2002. This directive follows a new format, and changes the amendment policy, per WMO guidelines, for visibility from 6NM to 5NM.

Signed June 20, 2003

Gregory A. Mandt
Director, Office of Climate,
Water, and Weather Services

Date

MARINE AND COASTAL SERVICES STANDARDS AND GUIDELINES

<u>Table of Contents</u> :			
1.	General Guidelines		
2.	Update Guidelines 2.1 Wind 2.2 Seas 2.3 Visibility 2.4 Weather 2.5 Severe Local Storm Watches	3 3 3	
3.	Warning/Advisory Guidelines		
4.	Coordination	4	
5.	Marine Standards	4	
Αŗ	endix		
	A NWS Marine Standards	A-1	

1. <u>General Guidelines</u>. The forecaster is responsible for the timeliness, currency, and accuracy of the marine weather products in his/her area of responsibility. However, to the extent possible, forecasters should try to maintain spacial and temporal consistency between adjoining offices and from one forecast period to the next.

Marine forecasts will include significant or predominant weather events impacting marine customers. Wind and sea conditions will always be included in NWS marine forecasts. To most effectively describe these conditions, one value or a small range of values should be used. To avoid confusion, transition terms for winds and seas should be discrete and consistently used (i.e., winds are rising or diminishing while seas are building or subsiding).

NWS marine products may include tidal information. If it is included, it should cover no more than 24 hours and will be based on official Government observations or predictions.

Marine forecasts should not use the word "under" when describing winds below a certain threshold. Instead use the words "less than". For instance, in the High Seas Forecast, state "WIND LESS THAN 20 KT" versus "WIND UNDER 20 KT". Similarly, do not use the word "below" when describing seas under a certain threshold. Instead use the words "less than".

For instance, in the High Seas Forecast, state "SEAS LESS THAN 8 FT", versus "SEAS BELOW 8 FT". Also, use separate sentences when describing the wind and sea conditions in the Offshore Waters Forecast; use one sentence when describing the wind and sea conditions in the High Seas Forecast.

2. <u>Update Guidelines</u>. Forecasters should update forecasts whenever existing or expected weather conditions differ significantly (i.e., there is a change in a warning or advisory status) from the forecast which are expected to continue for more than 2 hours. If an amendment is needed near the next scheduled forecast time (i.e., within an hour), the forecaster may issue that forecast early in lieu of an amendment. Specific instructions and criteria are described in NWSI 10-310, 10-311, and 10-312.

Based on available information, use the following guidelines for updating marine forecasts. The regions and local offices may develop local updating procedures and criteria to supplement these.

2.1 Wind. Amend if:

- a. Unpredicted change in status of advisories or warnings.
- b. Highest sustained wind speed increased or decreased 10 KT or more from forecast (20 KT or more if no change in storm or hurricane force wind warning status occurs).
- c. Mean wind direction changes by more than 45 degrees from forecast when speeds are 20 KT or greater.
- 2.2 <u>Seas</u>. Amend if unpredicted wind wave, swell, or combined seas begin to affect marine operations either adversely or favorably.

2.3 <u>Visibility</u>. Amend if:

- a. Forecast visibility of 5NM or more changes to 1 NM or less over a significant part of the forecast area
- b. Forecast visibility of 1NM or less increases to 5 NM or more over a significant part of the forecast area.
- 2.4 <u>Weather</u>. Amend if significant, unpredicted changes in weather begins to affect marine operations either adversely or favorably.
- 2.5 <u>Severe Local Storm Watches</u>. Amend if a watch for severe local storms is issued to include marine zones. (Do not issue a separate redefining statement for marine areas.)
- 3. <u>Warning/Advisory Guidelines</u>. Criteria for all marine warnings and advisories are

defined in NWSI 10-301. Instructions on warnings for short period events (lasting 2 hours or less) are contained in NWSI 10-313. Do not headline such warnings in marine forecasts.

Headlines or other appropriate methods for highlighting long period events (more than 2 hours) are described in NWSI 10-310, 10-311, and 10-312. One or two headlines should suffice in any marine forecast. Although forecasters may use general times (e.g., TODAY or THIS EVENING), do not use specific times in headlines (e.g., STORM WARNING AFTER 9 AM) as they make the forecast too perishable.

If, in a forecast, a forecaster includes a range of winds or seas which cross a warning or advisory threshold, the highest value will determine the advisory or warning category (e.g., a gale warning shall be in effect for a forecast of 'Winds 25 to 35 KT'). The forecaster may use gust speeds rather than the sustained winds if he/she judges this to better describe existing conditions.

If a tropical cyclone is anticipated to impact a marine area, the headlines associated with that system, as issued by the TPC, CPHC, or WFO Guam (based on Joint Typhoon Warning Center guidance) shall supercede all other headlines.

The phrase "IN EFFECT" to describe a warning or advisory is optional.

- 4. <u>Coordination</u>. Field offices with adjoining or overlapping areas of responsibility should coordinate to ensure products are consistent and compatible. This includes coordination with appropriate governmental forecast agencies outside the U.S.
- 4.1 <u>USCG</u>. The USCG is responsible for disseminating marine safety messages, including marine weather forecasts and warnings, to mariners in and around the U.S. coastline. It also retrieves and forwards observational data to the NWS. National, regional, and local level NWS managers should closely work with their USCG counterparts to ensure the most effective level of service is provided.
- 4.2 <u>Customers</u>. To ensure customer needs are being met, the NWS will maintain regular contact with customers of its marine products. Similarly, the NWS will cooperate with other NOAA offices to meet organizational goals.
- 5. <u>Marine Standards</u>. Appendix A provides the standards NWS personnel should strive for within the marine service program.

NWSI 10-303 JULY 8, 2003

APPENDIX A - NWS Marine Standards

<u>ASPECT</u>	STANDARD	MEASURE
Timeliness	Routine products disseminated according to published time schedules or,	Compare issuance and scheduled times
	Event driven products disseminated as soon as possible	Compare lead time between event occurrence and product issuance
Accuracy	Products consistent with actual weather	Compliance with amendment criteria
Consistency	Products coordinated between adjoining areas	Consistency between neighboring areas
	Products consistent with other in-office products	Consistency with appropriate aviation and public products
Format Correctness	Products disseminated in the proper	Comparison with approved format
	format Products contain required information	Comparison with approved content
	Products grammatically correct	Compliance with correct spelling and approved acronyms
Usefulness	Products clear and concise	Easily comprehended by customers